REMARKS

This Amendment, submitted in response to the Office Action dated April 26, 2005, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-5 have been examined and are rejected. As an initial matter, claim 1 is amended for merely cosmetic reasons to further improve its readability, and not for purposes of patentability. As these amendments are not believed to change the scope of the claim or require further search or consideration by the Examiner, entry and consideration of these amendments should be granted.

By way of overview, the Examiner is requested to interpret the phrase "transactional communication" consistent with Applicant's disclosure and as it is understood in the art. As explained in Applicant's specification, in order to be considered "transactional," an interface must support atomicity, consistency, isolation, and durability. (See Applicant's Specification at p. 1.) Thus, a transactional interface requires, for example, the ability to atomically "commit" or "abort" a sequence of operations as part of a logical "transaction." (See Id.)

"Transactional communications" differ from "transaction processing," wherein, although internal or external transactional interfaces may be used, the primary purpose of the system is processing consumer transactions, for example, consumer purchasing transactions. A particular interface or communication, however, is not "transactional," as understood by one of ordinary skill in the art, unless it supports the above-described functionality. In view of these

fundamental differences, the art rejections of claims 1-5 should be withdrawn for at least the

following reasons.

I. Claim Rejections under 35 U.S.C. § 102(b)

Claims 1-2 and 4 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated

by U.S. Patent No. 5,530,848 to Gilbert et al. ("Gilbert").

A. Claim 1

Claim 1 recites "a logging service associated with said communication channel

comprising an XA/RO interface to enable a transactional system to perform transactional

operations on data stored in said logging service." The portions of Gilbert cited by the Examiner

fail to disclose a logging service comprising an XA/RO interface, and fail to disclose a logging

service with the ability to accept transactional operations on its data. For example, as noted in

Applicant's Response filed on November 23, 2004, Gilbert merely describes "interfacing an

external process or processes to a transaction processing system."

In the Office Action, the Examiner alleges that Gilbert anticipates claim 1 by disclosing

the following:

(1) "input receive modules within the input receive subsystem . . . employed to interface

to multiple external applications for receiving input messages;"

(2) a "communications monitor subsystem [that] monitors . . . the outbound

communication process;" and

(3) a "communications monitor subsystem . . . [that] provides [a] confirming or aborting message to the communications log service." (See Office Action at pp. 7-8.)

Applicant respectfully submits that the features of claim 1 are not anticipated by these alleged disclosures of Gilbert. Additionally, it appears that the Examiner may be misconstruing the disclosure of Gilbert.

In support of the first alleged disclosure of Gilbert, the Examiner relies on Fig. 1 and col. 9, lines 33-44 of Gilbert. (Office Action at p. 7.) In Fig. 1, an "Input Receive Subsystem" 162 receives messages 132 and may return "confirmation" 144 that it has received messages 132. (See Gilbert at Fig. 1; Fig. 4 step 410.) Furthermore, at col. 9 lines 33-44, Gilbert discloses receiving input messages from external applications using "different protocols." The portions of Gilbert relied on by the Examiner, however, fail to disclose transactional communications.

For example, these portions do not disclose an interface that allows external applications to commit or abort transactions. Instead, Gilbert merely describes that when external messages are received, the receipt of those messages may be confirmed with a response, as is well-known in the art. In contrast, claim 1 recites "an XA/RO interface to enable a transactional system to perform transactional operations on data stored in said logging service." Thus, the XA/RO interface of claim 1 supports transactional operations, which the Input Receive Subsystem 162 and the other disclosed elements of Gilbert do not.

In support of the second alleged disclosure of Gilbert, the Examiner relies on Figs. 8, 14-16; col. 8, lines 59-65; and col. 11, lines 35-45. (Office Action at p. 7.) These portions of

Gilbert disclose the operation of the communications monitor subsystem 110, which monitors

the interface system status to ensure that outbound communications are handled correctly. For

example, Gilbert discloses that the "[c]ommunications monitor subsystem manages multiple

occurrences of the outbound communication process, insuring that only one task is started for

each destination, and that the messages are communicated in the correct order." (Gilbert at col.

8, lines 59-65.) The Examiner also relies on Gilbert's disclosure that the monitor subsystem 112

sends a "timing strobe," which polls certain processes to act when no other event has been

triggered. (Gilbert at col. 11, lines 35-45.) These portions of Gilbert, however, fail to disclose

the operation of a transactional interface. Instead, these portions of Gilbert merely disclose the

management of internal polling, triggering, and event firing.

In support of the Examiner's third alleged disclosure of Gilbert, the Examiner relies on

Figs. 1 and 4; Abstract; col. 2, line 65 - col. 3 line 20; col. 12, lines 27-31; and col. 17, lines 28-

44. (Office Action at p. 8.) Specifically, the Examiner alleges that these portions of Gilbert

disclose "confirm[ing] or cancel[ing] modifications to logged data." It is respectfully submitted

that the Examiner is misconstruing the language from page 4 of Applicant's specification, as also

described on page 4 of Applicant's response of November 23, 2004. Applicant's response of

November 23, 2004 reads: "As described on page 4 of the specification for the present invention,

in an exemplary embodiment of the invention, an RO or XA interface enables an external

transaction monitor to confirm or cancel modifications to logged data and recover data." By this

language, Applicant intended to communicate that the XA/RO interface enables external

applications to send commit or abort commands to commit or abort their transactional operations

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on logged data and recover data in a logging service. Applicant used the terms "confirm" and

"cancel" in the quoted sentence as equivalent to the terms "commit" and "abort," referring to the

above-described instructions commonly required for a transactional interface.

Consequently, the Examiner erred in stating that "the feature upon which Applicant relies

(i.e., confirm or cancel modifications), is not recited in the rejected claim(s)." (Office Action at

p. 7.) This functionality is part of the "RO/XA interface" and the "transactional operations"

recited in claim 1. Even without the express disclosure on page 1 of Applicant's specification,

one of ordinary skill in the art would recognize that transactional operations commonly require

such commit/abort functionality.

The Gilbert Abstract, relied on by the Examiner, discloses that the "interface system

sends a confirmation to the external process indicating that the message has been received."

Gilbert also discloses "an interface to the SAP system that provides acknowledgment to external

applications upon receipt of a message," and "[c]onfirm[s] receipt of a message from an external

application." (Gilbert at col. 2, line 65 - col. 3, line 20.) Gilbert further discloses receiving

messages from external applications, confirming receipt, and acting on each message. (Gilbert at

col. 12, lines 27-31.) Conversely, claim 1 recites an "XA/RO interface" and "transactional

operations" which allow an external process to commit or abort a transaction. It is respectfully

submitted that an external process sending a commit or abort message to a transactional interface

is clearly different from the disclosure of Gilbert, wherein a "confirmation to the external

process" is sent. In addition to having different functions and purposes, these messages also

have different senders and receivers. In Gilbert, an external process is the receiver of a

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confirmation message. Conversely, in claim 1, an external process is the sender of a commit instruction. Thus, the mere confirmation of receipt of a message is different from sending a commit message to an interface with transactional support.

The Examiner further alleges that Gilbert discloses the "XA/RO interface" recited in claim 1. (Gilbert at col. 2, lines 21-38; col. 3, lines 24-26.) Gilbert, discloses systems such as SAP with the ability to interface with external applications through messages that "can include data to be sent to the transaction processing system and instructions telling [it] how to operate on that data." (Gilbert at col. 2, lines 21-38.) Gilbert further discloses "interfacing an external process . . . to a transaction processing . . . system." (Gilbert at col. 3, lines 24-26.) These portions of Gilbert, relied on by the Examiner, fail to disclose any transactional interface. Instead, these portions of Gilbert merely disclose a generic interface to a transaction processing system.

Thus, Gilbert clearly does not disclose an interface that implements the commit/abort functionality commonly required of a transactional interface, such as the "XA/RO interface" recited in claim 1. Instead, Gilbert merely discloses a non-transactional interface by which external processes may send messages to be processed, and receive back confirmation regarding the status of those messages.

The Examiner also alleges that Gilbert "enables the transactional system to perform transactional operations on data stored in said logging service." (See Gilbert at col. 4, lines 5-21; col. 8, lines 47-50.) Gilbert discloses a trigger subsystem which "indicates to the transaction

processing system that a message has been received by the interface system and is ready to be processed." (Gilbert at col. 4, lines 5-21.) Accordingly, Gilbert merely discloses responding to receipt of a message with a confirmation message, or acknowledgment, which is well-known in the art. Gilbert, however, does not disclose that such communication is transactional in nature, or that the trigger subsystem works through an interface sufficient to "enable . . . transactional operations on data stored in said logging service," as recited in claim 1.

Gilbert further discloses that a status subsystem receives processing status messages from the transaction processing system, and updates a log file. (Gilbert at col. 8, lines 47-50.) These portions of Gilbert describe that an acknowledgment subsystem scans the log file and updates control records to indicate whether processing of a message is complete, and discloses "finish[ing]" records when transaction processing is complete or an error has occurred. Thus, Gilbert merely describes that the status subsystem updates a status indicator in the log file, in order to indicate whether processing of a message is complete, i.e., whether the message has been handled by the transaction processing system. "[F]inish[ing]" a record refers to setting the status of a record to "finished," thereby indicating that the record has finished being processed. Setting the status of a record is not the same as committing a set of transactional steps in a transactional communications system. Instead, Gilbert directly, non-transactionally manipulates status values within the log file.

For at least the above exemplary reasons, Gilbert fails to anticipate claim 1. Consequently, claim 1 and its dependent claims should be deemed allowable.

B. Claims 2 and 4

It is respectfully submitted that claims 2 and 4, which depend from claim 1, are not anticipated by Gilbert, at least by virtue of their dependency. Consequently, claims 2 and 4 should be deemed allowable.

II. Claim Rejections under 35 U.S.C. § 103(a)

A. Claim 3

Claim 3 stands rejected under 35 U.S.C. § 103(a) as being obvious over Gilbert in view of U.S. Patent No. 5,850,507 to Ngai et al. ("Ngai"). Claim 3 recites "a logging service having an XA/RO interface." Gilbert, as extensively described above with regard to claim 1, fails to disclose a logging service having an XA/RO interface, or any other transactional interface.

With regard to claim 3, the Examiner further relies on Gilbert's disclosure of error handling mechanisms using an "ABORT_FLAG," and an "ISSUEERROR" command. (See Gilbert at col. 17, lines 28-44; col. 27, lines 4-19.) The "ABORT_FLAG" is a boolean flag in the file header of a message received during "input receive processing," which is read only when an error occurs in processing a chain or set of messages. (See Gilbert at col. 17, lines 28-44.) This flag is read in order to determine how to properly handle the input error, i.e., by aborting the chain or set of messages, or by allowing the messages to process. (See Id.) This portion of Gilbert, therefore, merely discloses an error handling mechanism, and not a transactional interface as recited in claim 3. Furthermore, the "ISSUEERROR" command disclosed in Gilbert is "sent to the external application" if "an error is encountered while sending a communication."

(Gilbert at col. 27 lines 4-19.) This is not the same as an XA/RO interface on a logging service, enabling an external application to abort a transaction. This portion of Gilbert, therefore, merely describes a method of communicating error information to an external application, and fails to disclose an XA/RO interface, as recited in claim 3.

Thus, Gilbert fails to teach or suggest "a logging service having an XA/RO interface," as recited in claim 3, and would not have enabled the artisan of ordinary skill to achieve all of the claimed subject matter without further untaught modifications.

Additionally, the Examiner's reliance on Ngai fails to cure the exemplary deficiencies of Gilbert, as explained above. The Examiner relies on Ngai to allegedly cure Gilbert's failure to "teach the '*enable recovery of validated transactional operations*'." (emphasis in original.) Even if Ngai were to cure this particular deficiency of Gilbert, Applicant respectfully submits that Ngai still remains deficient because Ngai fails to teach or suggest "a logging service having an XA/RO interface." Although Ngai does disclose a "redo log," (Ngai at col. 1 lines 40-52) Ngai fails to disclose the type of interface used with this redo log, and fails to teach or suggest the form or function of such an interface. Ngai, therefore, fails to teach or suggest "a logging service having an XA/RO interface," as recited in claim 3. Since Gilbert also fails to teach or suggest this element of claim 3, as described above, claim 3 is patentable over Gilbert and Ngai, alone or in combination. Accordingly, Applicant respectfully requests the Examiner to withdraw this rejection of claim 3.

B. Claim 5

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Gilbert in view of Ngai. It is respectfully submitted that the portions of Ngai cited by the Examiner fail to make up for the exemplary deficiencies of Gilbert with respect to claim 1, from which claim 5 depends. For example, although Ngai discloses a "redo log," (Ngai at col. 1 lines 40-52) Ngai does not describe the interface to this redo log. Ngai fails to teach or suggest any particular form or function for the redo log interface, and thus fails to teach or suggest "a logging service . . . comprising an XA/RO interface," as recited in claim 5. Gilbert also fails to teach or suggest this element of claim 5, as described above with regard to claim 1, so the combination of Gilbert in view of Ngai fails to teach or suggest these elements of claim 5 as well. Claim 5 is therefore patentable over Gilbert and Ngai, alone or in combination. Accordingly, Applicant respectfully requests the Examiner to withdraw this rejection of claim 5.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

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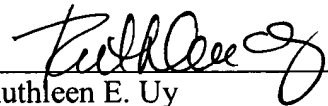
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